

BEST AVAILABLE COPY

- BEST AVAILABLE COPY
1. A surface material comprising:
vulcanized rubber particles;
a color coating covering said vulcanized rubber particles; and
a polymer coating covering said color coating to thereby form abrasion
resistant surface material.
 2. The surface material of claim 1, wherein said surface is a playground surface.
 3. The surface material of claim 1, wherein said surface is landscaping mulch.
 4. The surface material of claim 1, wherein said color coating is selected from the
group consisting of an organic pigment and an inorganic pigment.
 5. The surface material of claim 4, wherein said color coating further comprises an
opacifying pigment, an extender, a nonionic surfactant, and an anionic surfactant.
 6. The surface material of claim 1, further comprising an agent selected from the
group consisting of an ultraviolet light absorber, an ultraviolet light quencher, a
hindered amine light stabilizer, an antioxidant, and an antiozonate.
 7. The surface material of claim 1, wherein said polymer coating is selected from the
group consisting of fully-saturated polyacrylate co/terpolymer, polyurethane, self-
crosslinking functionalized polyacrylate multipolymer, styrene/butadiene rubber,
and polybutadiene rubber.
 8. The surface material of claim 6, wherein said polymer encapsulates said
vulcanized rubber particle.
 9. A method of preparing colored rubber particles comprising:
mixing vulcanized rubber particles with an aqueous pigment dispersion to
color coat said rubber particles thereby forming color coated rubber particles; and
adding an emulsion polymer to said color coated rubber particles to form a
protective film around said color coated rubber particles.
 10. The method of claim 9, further comprising heating the color coated rubber
particles after the emulsion polymer has been added.
 11. The method of claim 9, wherein said aqueous pigment dispersion is selected from
the group consisting of an aqueous organic pigment dispersion and an aqueous
inorganic pigment dispersion.
 12. The method of claim 11, wherein said aqueous pigment dispersion has a total
solids content of about 25 to 65 percent.

5

13. The method of claim 11, wherein said aqueous organic pigment dispersion further comprises one or more of the following: an extender, a rheological agent and an opacifying pigment.

10

14. The method of claim 11, wherein the amount of said aqueous pigment dispersion in said mixture is about 0.01 to about 8.00 weight percent of said vulcanized rubber particles.

15

15. The method of claim 11, wherein said step of mixing and adding occur sequentially.

16. The method of claim 11, wherein said emulsion polymer is selected from the group consisting of fully-saturated polyacrylate co/terpolymer, polyurethane, self-crosslinking functionalized polyacrylate multipolymer, styrene/butadiene rubber, and polybutadiene rubber.

17. The method of claim 15, wherein said emulsion polymer has a T_g in the range of about -70°C to 20°C .

18. A method of converting vulcanized rubber into surface covering material comprising:
 mixing rubber particles with an aqueous pigment dispersion to form mixture;
 stirring said mixture to color coat said rubber particles thereby forming color coated rubber particles; and
 adding an aqueous polymer dispersion to said color coated rubber particles to encapsulate said color coated rubber particles and form a protective film around said color coated rubber particles.

19. The method of claim 18, wherein said vulcanized rubber comprises scrap tires.

20. The method of claim 18, wherein said aqueous pigment dispersion comprises a pigment and an aqueous dispersant.

BEST AVAILABLE COPY